Goals

Maintain and Protect Publicly Owned Habitat Base. Maintain in public ownership and protect the habitat values of sufficient suitable lands and waters to provide for the habitat needs of fish and wildlife resources necessary to maintain or enhance public use and economic benefits.

Ensure Access to Public Lands and Waters. Ensure access to public lands and waters, and where appropriate, promote or enhance public use and enjoyment of fish and wildlife resources. Access improvements should be designed to match the public use objectives for the area under consideration.

Mitigate Habitat Loss. When resource development projects occur, avoid or minimize reduction in the quality and quantity of fish and wildlife habitat.

Contribute to Economic Diversity. Protect and enhance fish and wildlife resources and habitats to contribute directly or indirectly to local, regional, and state economies through commercial, subsistence, sport, and non-consumptive uses, while working to achieve the economic development of other resources.

Management Guidelines

A. Mitigation. The following policy will apply where coastal district mitigation policy is not in effect for state lands. When issuing permits and leases or otherwise authorizing the use or development of state lands, the Department of Natural Resources will recognize the requirements of the activity or development and the benefits it may have to habitat when determining stipulations or measures needed to protect fish and wildlife or their habitats. The costs of mitigation relative to the benefits to be gained will be considered in the implementation of this policy.

All land use activities should be conducted with appropriate planning and implementation to avoid or minimize adverse effects on fish and wildlife or their habitats.

The departments will enforce stipulations and measures, and will require the responsible party to remedy any significant damage to fish and wildlife or their habitats that may occur as a direct result of the party's failure to comply with applicable law, regulations, or the conditions of the permit or lease.

When determining appropriate stipulations and measures, the department will apply, in order of priority, the following steps. Mitigation requirements listed in other guidelines in this plan will also follow these steps.

- 1. Avoid anticipated, significant adverse effects on fish and wildlife or their habitats through siting, timing, or other management options.
- 2. When significant adverse effects cannot be avoided by design, siting, timing, or other management options, the adverse effect of the use or development will be minimized.
- 3. If significant loss of fish and wildlife habitat occurs, the loss will be rectified, to the extent feasible and prudent, by repairing, rehabilitating, or restoring the affected area to a useful state.
- 4. DNR will consider requiring replacement or enhancement of fish and wildlife habitat when steps 1 through 3 cannot avoid substantial and irreversible loss of habitat. DF&G will clearly identify the species affected, the need for replacement or enhancement, and the suggested method for addressing the impact. Replacement or enhancement of similar habitats of the affected species in the same region is preferable. DNR will consider only those replacement and enhancement techniques that have either been proven to be, or are likely to be effective and that will result in a benefit to the species impacted by the development. Replacement or enhancement will only be required by DNR if it is determined to be in the best interest of the state either through AS 38.05.035(e) or permit review process. Replacement may include structural solutions such as creating spawning or rearing ponds for salmon, creating wetlands for waterfowl, or

2-6 Northwest Area Plan

non-structural measures such as research or management of the species affected, legislative or administrative allocation of lands to a longterm level of habitat protection that is sufficiently greater than that which they would have otherwise received, or fire management to increase habitat productivity.

- B. Activities in Important Waterfowl Habitat. In important waterfowl habitat, activities that require a permit, lease, or development plan and produce high levels of acoustical or visual disturbance from sources such as boat traffic, blasting, dredging, and seismic operations will, to the extent feasible and prudent, be avoided during sensitive periods. Where it is not feasible and prudent to avoid such activities, other mitigative measures will be considered to attempt to avoid significant impacts (see Guideline A above). The Department of Fish and Game (DF&G) will be consulted for assistance in identifying areas of important waterfowl habitat.
- C. Structures in Fish Habitat. Structures in fish habitat will, to the extent feasible, be designed to minimize impacts on fish migration, spawning, and rearing.
- D. Water Intake Structures. DNR will consult with DF&G before issuing appropriations for water. Water intake structures will be screened and intake velocities will be limited when deemed necessary by DF&G to prevent entrapment, entrainment, or injury to fish. Screen size, water velocity, and intake design will be determined in consultation with DF&G. Structures that support these intakes should be designed to prevent fish from being led into the intake.
- E. Water Withdrawal in the Winter. Water withdrawal during winter months will, to the extent feasible and prudent, avoid fish overwintering areas.
- F. Threatened and Endangered Species. All land use activities will be conducted consistent with state and federal Endangered Species Acts to avoid jeopardizing the continued existence of threatened or endangered species of fish or wildlife or their continued use of an area, and to avoid modification or destruction of their habitat. Specific mitigation recommendations should be identified through interagency consultation for any land use activity that potentially

affects threatened or endangered species. In Alaska, five bird species are listed under the jurisdiction of the U.S. Fish and Wildlife Service and Alaska Department of Fish and Game as threatened or endangered in accordance with state and federal Endangered Species Acts, as amended:

- 1. Arctic peregrine falcon (Falco peregrinus tundrius)
- 2. American peregrine falcon (Falco peregrinus anatum)
- 3. Aleutian Canada goose (Branta canadensis leucopareia)
- 4. Eskimo curlew (Numenius borealis)
- 5. Short-tailed albatross (Diomedea alabatrus)

The Aleutian Canada goose and the short-tailed albatross are unlikely to be found in Northwest Alaska.

Activities that potentially affect bald and golden eagles will be consistent with the federal and state endangered species act and the Bald Eagle Protection Act of 1940 as amended.

The Fairbanks Fish and Wildlife Enhancement Office of the U.S. Fish and Wildlife Service should be consulted on questions that involve endangered species.

G. Tundra Swan Nesting Areas. In tundra swan nesting areas, all land use activities that would disturb nesting swans or detrimentally alter the nesting habitat will be avoided to the extent feasible and prudent. Where these activities are deemed feasible and prudent, they will be conducted to minimize disturbance to nesting swans or detrimental alteration of habitat. Leases or permits may include seasonal restrictions on activities to avoid disturbance to swans. Consultation with the DF&G will be used to identify current or potential nesting habitat and to determine guidelines to follow and activities to avoid.

Construction of transmission lines in trumpeter swan habitat should be avoided. If transmission lines are constructed, they should be sited in forested areas and kept close to treetop level; wires should be strung in one horizontal plane rather than in multiple, vertical stacks. Where lines cross rivers, marshes, and other open spaces, they should be marked so that they are visible to swans.

- H. Avoid Conflicts With Traditional Uses of Fish and Game. Where feasible and prudent, surface activities authorized under lease or permit will avoid significant conflicts with local subsistence harvests and other traditional uses of fish and wildlife resources. The expertise of local Fish and Game Advisory Committees and regional non-profit associations should be sought when making decisions on permits for trapping cabins, grazing, rights-of-way, exclusive use, or actions requiring notice under AS 38.05.945 (see *Coordination and Public Notice*, Guideline C, page 2-5).
- I. Avoid Creating Nuisance Animals. Garbage associated with uses authorized under a lease or permit will be thoroughly incinerated or removed for disposal at an approved location to avoid creating nuisance animals that must be relocated or destroyed. Burning will be done consistent with Division of Forestry burning restrictions.
- J. Mouths of Anadromous Streams and Enclosed Estuaries. Extraction of sand and gravel or recoverable minerals from an area within one mile offshore from the ordinary high water mark of anadromous fish streams, measured from their confluence with mean lower-low water or from within enclosed estuaries, such as lagoons, basins, and inlets, may be allowed only after the project applicant provides information demonstrating to DNR, DF&G, DEC, and the appropriate coastal district, that mining and related activities will avoid significant adverse impacts to anadromous fish and their habitat (see Mitigation, Guideline A, page 2-6).
- K. Seabird Colonies and Marine Mammal Haulouts. Seabird colonies and walrus, sea lion, and seal haul-outs and rookeries will not be physically altered or disturbed in a manner that would preclude or significantly interfere with continued use of these sites. Development structures or facilities will not be allowed within one-half mile of these sites from April 15 through September 30. Land and water activities with high levels of acoustical or visual disturbance will, to the extent feasible and prudent, be prohibited

within: one mile of seabird colonies from April 15 through September 30; one-half mile landward and two miles seaward of walrus haulouts from May 1 through December 31; and one-half mile of seal haulouts from March 1 through September 30. These areas are shown on the management unit maps in Chapter 3. To date, no sea lion haulouts have been identified by DF&G in the planning area.

- L. Reindeer Herd Management and Overwintering Moose. Authorizations for reindeer herding will be reviewed by DF&G to address limitations on herding activities in riparian moose winter habitats. The intent is to avoid conducting winter activities that will disturb moose and cause them unnecessary energy expenditures.
- M. Habitat Manipulation. Habitat manipulation through controlled burning, water control, timber management practices, or other measures may be used to improve habitat for certain fish and wildlife species where feasible and compatible with other primary uses.
- N. Management of Trapping Cabins. See *Trapping Cabin* Guideline A, p. 2-26.
- O. Other Guidelines Affecting Fish and Wildlife Habitat. Several other guidelines may affect the protection and management of fish and wildlife habitat. See the following sections of this chapter:

Coordination and public notice Grazing Forestry Heritage resources Lakeshore management Materials Public access Public and commercial recreation Settlement Shoreline development Stream corridors and instream flow Subsistence activities and traditional uses Subsurface resources Trail management Transportation and utilities Wetlands management

2-8 Northwest Area Plan

Land Allocation Summary

Although all lands, including lands in disposal areas, serve as fish or wildlife habitat and harvest areas to some degree, the most important habitat and public use lands will be retained in public ownership and managed to maintain fish and wildlife production and related public uses. Within the planning area, lands with the highest value for fish and wildlife habitat and harvest generally occur along the coast and along the navigable portions of major river systems that contain anadromous fish and important habitat for marine mammals, moose, bear, caribou, and furbearers.

Fish. Fish and wildlife habitat and harvest are identified as a primary use of state lands along most rivers, streams, and lakes with anadromous fish and important resident fish populations. To protect important sheefish spawning areas, seven segments of streambed and adjacent uplands will be closed to new mineral entry. Special guidelines apply to particularly important habitat areas, such as marine mammal haulouts and mouths of anadromous streams or enclosed estuaries.

Wildlife. State land in the planning area provides habitat for marine mammals, birds, moose, caribou, bear, Dall sheep, furbearers and other animals. These resources are used by people from throughout the state as well as outside of Alaska. Wildlife habitat is designated as a primary use on all lands important for wildlife habitat or used for hunting, except in areas identified for land disposals. Thirteen seabird rookeries and lands within a quarter-mile radius of these rookeries will be closed to mineral entry to protect this valuable habitat; one seabird rookery will not be available for coal leasing.

Eighteen subunits have been assigned wildlife habitat as the primary or co-primary designation:

Management Unit	Subunit
1. Lisburne	1a, 1c, 1e
2. Kotzebue Sound	2a, 2c, 2f
3. Kobuk	3b, 3d, 3g
4. Northwest Seward Peninsula	4a, 4c, 4f
5. Southwest Seward Peninsula	5a, 5c, 5g
6. Norton Sound	6a, 6c
7. Remnant Rivers	7

Northwest Area Plan 2-9